European Network of Transmission System Operators for Electricity

entsoe

All TSOs' proposal for the Key Organisational Requirements, Roles and Responsibilities (KORRR) relating to Data Exchange in accordance with Article 40(6) of the Commission Regulation (EU) 2017/1485 of 02 August 2017 establishing a Guideline on Transmission System Operation

02/10/2017

1
2
3
4
5
6

DISCLAIMER
This document is released on behalf of the all transmission system operators ("TSOs") only for the purposes of the public consultation on the all TSOs' proposal for KORRR relating to Data Exchange in accordance with Article 40(6) of the Commission Regulation (EU) 2017/1485 of 02 August 2017 establishing a Guideline on Transmission System Operation. This version of the KORRR Proposal does not in any case represent a firm, binding or definitive TSOs' position on the content.

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

All TSOs, taking into account the following,

Whereas

(1) This document is a common proposal developed by all Transmission System Operators (hereafter referred to as "TSOs") regarding the development of a proposal for the key organisational requirements, roles and responsibilities relating to Data exchange (hereafter referred to as "KORRR").

(2) This proposal (hereafter referred to as the "KORRR Proposal") takes into account the general principles and goals set in the Commission Regulation (EU) 2017/1485 establishing a guideline on Transmission System Operation (hereafter referred to as the "Regulation 2017/1485"), Regulation (EU) No 2015/1222 establishing a guideline on capacity allocation and congestion management (hereafter referred to as "CACM"), as well as Regulation (EC) No 714/2009 (hereafter referred to as "Regulation (EC) No 714/2009").The goal of Regulation 2017/1485 is safeguarding operational security, frequency quality and the efficient use of the interconnected system and resources. To achieve it, it is necessary that each party of the electric system has the necessary observability of the network elements and services with impact in their activities. Of special relevance is the global demand-generation balance, whose responsibility is assigned to the TSO in Regulation (EC) No 714/2009. This proposal addresses the key roles, requirements and responsibilities regarding the necessary data exchange to have that observability.

(3) The KORRR takes into account and complements where necessary the operational conditions and requirements set out in the generation and load data provision methodology (hereafter referred to as "GLDPM") developed in accordance with Article 16 of CACM. This complementarity refers to who, how and when the data defined in GLDPM has to be exchanged.

(4) Article 40(6) of Regulation 2017/1485 constitutes the legal basis for this proposal and defines the requirements that the KORRR Proposal should take into account:

By 6 months after entry into force of this Regulation, all TSOs shall jointly agree on key organisational requirements, roles and responsibilities in relation to data exchange. Those organisational requirements, roles and responsibilities shall take into account and complement where necessary the operational conditions of the generation and load data methodology developed in accordance with Article 16 of Regulation (EU) No 2015/1222. They shall apply to all data exchange provisions in this Title and shall include organisational requirements, roles and responsibilities for the following elements:

(a) obligations for TSOs to communicate without delay to all neighbouring TSOs any changes in the protection settings, thermal limits and technical capacities at the interconnectors between their control areas;

(b) obligations for DSOs directly connected to the transmission system to inform their TSOs, within the agreed timescales, of any changes in the data and information pursuant to this Title;

(c) obligations for the adjacent DSOs and/or between the downstream DSO and upstream DSO to inform each other within agreed timescales of any change in the data and information established in accordance with this Title;

(d) obligations for SGUs to inform their TSO or DSO, within agreed timescales, about any relevant change in the data and information established in accordance with this Title;

(e) detailed contents of the data and information established in accordance with this Title, including main principles, type of data, communication means, format and standards to be applied, timing and responsibilities;

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

(f) the time stamping and frequency of delivery of the data and information to be provided by DSOs and SGUs, to be used by TSOs in the different timescale

s. The frequency of information exchanges for real-time data, scheduled data and update of structural data shall be defined; and

(g) the format for the reporting of the data and information established in accordance with this Title. The organizational requirements, roles and responsibilities shall be published by ENTSO for Electricity.

(5) Article 40(5) specifies that the TSO shall define, in coordination with DSOs and SGUs, the applicability and scope of the Data Exchange based on Title II of Regulation 2017/1485.

(6) Article 40(7) specifies the obligation for the TSOs to coordinate with the relevant DSOs on the process for exchanging information between them, including the format of the data exchanges.

(7) Article 75 specifies the obligation for the TSOs to develop a methodology for coordinating operational security analysis. The KORRR shall include the method for assessing the relevant of network elements to define the observability area of the TSO.

(8) Article 40(10) specifies the obligation for neighbouring DSOs to determine in a coordinated manner the scope of information exchanged between them.

(9) Article 6(6) of Regulation 2017/1485 requires that the expected impact of the KORRR Proposal on the objectives of Regulation 2017/1485 is described. The impact is presented below (points (10) to (18) of this Whereas Section).

(10) KORRR Proposal stablishes a common framework for the data exchange for all TSOs in the interconnected system, in line with requirement of Article 4(1)(a) of Regulation 2017/1485.

(11) In the aim to get common operational planning principles as requested by Article 4(1)(b) of Regulation 2017/1485, KORRR Proposal allows receive the data to prepare scenarios to perform operational security analysis in the planning stage.

(12) KORRR Proposal includes the organization to exchange, among other, real time data, necessary to perform the load-frequency control processes as defined in Article 4(1)(c) of Regulation 2017/1485.

(13) To ensure the conditions for maintaining operational security throughout the Union as specified in Article 4(1)(d) of Regulation 2017/1485, TSOs needs to have good observability of the System in order to perform reliable security analysis. KORRR Proposal aims to set the framework to facilitate the access of TSOs to necessary data to achieve observability and prepare accurate scenarios.

(14) Data exchange regarding capabilities and active power production is necessary for TSOs to fulfil processes to maintain a frequency level of all synchronous areas throughout the Union as defined in Article 4(1)(e) of Regulation 2017/1485.

(15) KORRR Proposal takes into account the exchange of structural and scheduled data among TSOS and DSOs to perform security analysis before and in real time to promote the coordination of system operation and operational planning as defined in Article 4(1)(f) of Regulation 2017/1485.

(16) Article 4(1)(g) aims at ensuring and enhancing the transparency and reliability of information on transmission system operation and KORRR Proposal stablishes the framework to regulate the necessary information among different parties in the electric system to guarantee operational security.

(17) KORRR Proposal will contribute to the efficient operation and development of the electricity transmission system and electricity sector in the Union while having good observability of the system to perform reliable security analysis and thus identifying possible improvements in the Transmission System.

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

(18) In conclusion, the KORRR Proposal contributes to the general objectives of the Regulation 2017/1485 to the benefit of all TSOs, NEMOS, the Agency, regulatory authorities and market participants.

SUBMIT THE FOLLOWING KEY ORGANISATIONAL REQUIREMENTS, ROLES AND RESPONSILBITIES RELATING TO DATA EXCHANGE TO ALL REGULATORY AUTHORITIES:

TITLE 1
General Provisions

Article 1
Subject matter and scope

1. The KORRR as determined in this proposal shall be considered as the common proposal of all TSOs in accordance with Article 40(6) of Regulation 2017/1485 and shall include organisational requirements, roles and responsibilities for Data Exchange according to Title II of that regulation.
2. The KORRR shall apply to all TSOs in the area referred to in Article 2(2) of Regulation 2017/1485.
3. When applying the KORRR and the TSOs shall:
   a. apply the principles of proportionality and non-discrimination;
   b. ensure transparency;
   c. apply the principle of optimisation between the highest overall efficiency and lowest total costs for all parties involved;
   d. respect the responsibility assigned to the relevant TSO in order to ensure system security, including as required by national legislation;
   e. consult with relevant DSOs and take account of potential impacts on their system; and
   f. take into consideration agreed European standards and technical specifications.
4. TSOs from jurisdictions outside the area referred to in Article 2(2) of Regulation 2017/1485 may adopt KORRR Proposal on a voluntary basis, provided that
   a. For them to do so is technically feasible and compatible with the requirements of Regulation 2017/1485;
   b. They agree that they shall have the same rights and responsibilities with respect to the Data Exchange process as the TSOs referred to in paragraph 2, in particular, they shall accept that The KORRR applies to the relevant parties in their control area as well;
   c. They accept any other legally feasible conditions related to the voluntary nature of their participation in the Data Exchange process that the TSOs may set;
   d. The TSOs referred to in paragraph 2 have concluded an agreement governing the terms of the voluntary participation with the TSOs referred to in this paragraph;
   e. Once TSOs participating in the Data Exchange process on a voluntary basis have demonstrated objective compliance with the requirements set out in (a), (b), (c) and (d), the TSOs referred to in paragraph 1, after checking that the criteria in (a), (b), (c) and (d) are met, have approved an application from the TSO wishing to join the KORRR process in accordance with the procedure set out in Article 5(3) of Regulation 2017/1485.
5. The TSOs referred to in paragraph 2 shall monitor that TSOs participating in the Data Exchange process on a voluntary basis pursuant to paragraph 4 respect their obligations. If a TSO participating in the Data Exchange process pursuant to paragraph 4 does not respect its essential obligations in

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

a way that significantly endangers the implementation and operation of Regulation 2017/1485, the TSOs referred to in paragraph 2 shall terminate that TSO's voluntary participation in the Data Exchange process in accordance with the procedure set out in Article 5(3) of Regulation 2017/1485.

Article 2
Definitions

1. For the purposes of the KORRR, terms used in this document shall have the meaning of the definitions included in Article 3 of the SO GL Regulation, Article 2 of Regulation (EU) 2015/1222, Article 2 of Regulation (EC) No 714/2009, Article 2 of Commission Regulation (EU) No 543/2013, Article 2 of Regulation (EC) No 631/2016, Article 2 of Regulation (EC) No 1388/2016, Article 2 of Regulation (EC) No 1447/2016 as well as Article 2 of Directive 2009/72/EC of the European Parliament and of the Council and the other items of legislation referenced therein.
2. In the KORRR, unless the context requires otherwise:
   a) the table of contents, headings and examples are inserted for convenience only and do not affect the interpretation of the KORRR;
   b) any reference to legislation, regulations, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force;
3. The KORRR shall be binding upon and shall ensure to the benefit of the TSOs as referred to herein and their permitted successors and assigns and irrespective of any change in the TSOs' names.
4. For the purpose of the KORRR, and aggregation means a set of power generation unites, demand facilities, closed distribution systems which can operate as a single facility or closed distribution system for the purposes of offering one or more balancing or congestion management service.
5. For the purpose of the KORRR, a modification is considered significant when it is significant in EU 2016/631 (NC RfG), EU 2016/1388 (NC DCC) or EU 2016/1447 (NC HVDC).
6. For the purpose of the KORRR, Real Time Data means a representation of the actual state of the facilities no more than one minute old.
7. For the purpose of the KORRR, SGUs are considered to provide data directly to the TSO or DSO when they are the first TSO or DSO that receives that data from the SGU.

Article 3
General responsibilities

1. Each TSO, DSO, CDSO or SGU will be responsible for the quality of the information they provide regarding their facilities or services. Except where explicitly otherwise stated, they shall be the party required to provide the data.
2. In the case of an aggregator, the aggregation of the facilities shall be considered as the SGU and the aggregator responsible for the data provision. In some cases, an individual power generating module or demand facility included in the aggregation may also be an SGU and may still have obligations to provide data under Regulation 2017/1485 independently of the aggregator.
3. Transmission connected SGUs and SGUs providing services directly to the TSO shall provide data directly to the TSO.

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

4. Each TSO, in coordination with the DSOs in its Control Area, shall define whether the distribution connected SGUs in its control area shall provide the structural, scheduled and real-time data directly to the TSO and/or to the DSO they are connected. The decision for each type of information and type of SGU may be independent. When the data is directly provided to the TSO, after request of the DSO to whose network the SGU is connected, the TSO shall make it available for the DSO. When the data is provided to the DSO, the DSO shall provide the data to the TSO. The quality and granularity of the data shall be maintained or improved.
5. When the TSO or the DSO receives the data directly from the SGU, the TSO or DSO shall check that the data complies with the quality requirements specified according to the KORRR before sharing it with another entity.
6. As far as reasonably possible CDSOs, SGUs shall not be required to provide the same data directly to both the TSO and the DSO it is connected to.
7. DSOs, CDSOs and SGUs shall be responsible for the installation, configuration, security and maintenance of the communication systems to exchange data with the TSO according to the KORRR unless explicitly otherwise agreed with the TSO.
8. Subject to the agreement of the TSO, parties required to provide data under the KORRR shall be allowed to delegate all or part of any tasks assigned to it under Regulation 2017/1485 to one or more third parties like BRP, BSP, aggregators or similar entities, in case the third party can carry out the respective function at least as effectively as the delegating entity. The delegating entity shall remain responsible for ensuring compliance with the obligations under Regulation 2017/1485, including ensuring access to information necessary for monitoring by the regulatory authority.

Article 4
Confidentiality

1. Except where explicitly stated otherwise, all data affected by the KORRR shall be confidential. In accordance with Article 12 of Regulation 2017/1485, each party receiving data according to the KORRR shall implement appropriate technical and organizational measures to ensure that data is not divulged to any other person or authority, without prejudice to cases covered by national law, other provisions of the Regulation 2017/1485 or other relevant Union legislation.
2. Each Power Generation Facility, Demand Facility or CDSO considered as a SGU according to Article 2(1) of Regulation 2017/1485 shall have access to the structural information referring to its facilities stored by the TSO or DSO.
3. Each DSO and CDSO shall have access to the Structural, Scheduled and Real-Time information of the SGUs connected to its distribution or closed distribution network.
4. DSOs and CDSOs shall have access to the Structural, Scheduled and Real-Time information of the commissioned facilities of the Transmission Network in their connection point. Upon justification of the need of the information for operational security reasons, they may request further structural or Real-Time information from commissioned facilities of the Transmission System of the Control Area they are connected. When the request of information comes from a CDSO, it shall not include the Connection Point of other CDSOs or SGUs. TSOs may give positive or justified negative answer to the request.

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

5. SGUs shall have access to the Structural and Real-Time information of the commissioned facilities of the Transmission System or Distribution System in their connection point. It shall not include the Connection Point of other CDSOs or SGUs.
6. Competent National Regulatory Authorities shall have access to all information exchanged according to the KORRR upon request.
7. Subject to the confidentiality obligations set out in Article 12 of Regulation 2017/1485, TSOs may share the data obtained with all other TSOs that have fully implemented the requirements set out in KORRR proposal.
8. The TSOs may share structural information of DSOs, CDSOs or SGU with a third party to comply with the responsibilities defined in Regulation 2017/1485, subject to the formalization of a confidentiality and a limitation of use agreement.

TITLE 2
Key Organisational Requirements, Roles and Responsibilities

Chapter 1
Responsibilities of TSOs

Article 5
General Responsibilities

1. Each TSO shall define the observability area of the neighbouring TSOs' transmission systems according to the methodology of Article 75 Regulation 2017/1485 and communicate it to the affected TSOs.
2. Each TSO shall define the observability area of the connected distribution network of its control area according to the methodology of Article 75 Regulation 2017/1485 and communicate it to the affected DSOs.
3. Each TSO shall provide updated information of their transmission system that is part of the observability area of neighbouring TSO to those TSOs.
4. Each TSO shall provide updated information of the DSO network of its control area that is part of the observability area of neighbouring TSO to those TSOs.
5. TSOs may use the information platform developed in accordance with Article 114 of Regulation 2017/1485 to exchange structural and scheduled information with other TSOs.

Structural data
Article 6
Data storage

1. Each TSO shall gather, update and maintain the structural data necessary to operate the interconnected system within its control area.
2. Each TSO shall store electronically the structural data of the electric system. The storage shall contain the information from the Transmission System, from the observability area in the Distribution

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

Networks, from the observability area in neighbouring Transmission Systems and from the SGU according to articles 41, 43, 45, 48, 51 and 52 of Regulation 2017/1485.

3. Each TSO shall specify the format and may publish templates for the structural data that DSOs and SGUs shall provide. The format or template have to include the detailed content of the structural data that have to be provided.

Article 7
Notification of changes

1. Each TSO shall review the structural information it shares with other TSOs at least every 6 months and provide updated information of the observability area to the neighbouring TSO in the following situations:
   a) At least 3 months before commissioning of a new network element or facility;
   b) At least 3 months before final removal from service of the network element or facility;
   c) At least 3 months before significant modifications in the network element or facility;
   d) As soon as possible in case there is a change in the Observability Area;
   e) As soon as an error is detected.
2. According to the information stated in the Articles 4(4) and 4(5), DSOs and SGUs may request the update of the structural data to its TSO.

Scheduled data

Article 8
Responsibilities of TSOs

1. Each TSO shall be capable of exchanging scheduled data with NEMOS, SGUs, DSOs or third parties to whom the exchange of scheduled information may have been delegated. Scheduled data shall at least include the generation and load schedules resulting from markets trade between Day ahead and real time, unavailability or limitations to active power production or consumption of SGUs, unavailability of network elements of DSOs in the TSO's observability area
2. Each TSO shall define and publish the format of the information and the technical requirements to exchange the scheduled data. The technical requirements should where possible, be in accordance with an international standard recommended by all TSOs and with current technologies to guarantee security, confidentiality and redundancy of the communications.
3. Each TSO shall electronically store the information at least during the necessary time to comply with its tasks.
4. Each TSO shall communicate to the DSOs directly connected to the transmission system their planned and unplanned unavailability of network elements in their connection point at least during day-ahead or before.

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

Real Time data

Article 9
Content of Real Time Information

1. Each TSO may specify more detailed content of the real-time information exchanged according to Articles 42, 44, 47, 50, 52 and 53 of Regulation 2017/1485.

Article 10
Format of Real Time Information

1. Each TSO, in coordination with the DSOs of its control area, shall specify and publish the format for real-time data exchange related to the distribution network observability area and to the SGUs within its Control Area.
2. Each TSO shall specify the requirements for real-time data exchange related to the distribution network observability area and to the SGUs within its Control Area. The technical requirements should where possible, be in accordance with an international standard recommended by all TSOs and with current technologies to guarantee security, confidentiality and redundancy of the communications.
3. Each TSO, when exchanging real time information with other TSOs, shall follow and fulfil all the rules and obligations according to the current all TSOs practices in term of:
   a) Logical connections between parties and protocols used;
   b) Network architecture including redundancy;
   c) Network security rules;
   d) ID and/or naming convention and data quality;
   e) Data Transmission Parameters and performance;
   f) Rules of conduct in the case of planned outages and disturbances of communication equipment.
4. Each TSO shall define the refresh rate for the real-time data exchanges in its control area. It shall not be longer than 1 minute. For data related to load-frequency control, it shall not be longer than 10 s.

Chapter 2
Responsibilities of DSOs

Structural data

Article 11
Structural Data provided by DSOs

1. Each DSO shall provide to its TSO the updated structural data of the observability area in the distribution network operated by them according to Article 43 of Regulation 2017/1485.

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

Article 12
Notification of changes

1. Each DSO shall review the structural information it shares with the TSOs of its control area at least every 6 months and provide updated information to the TSO in the following situations:
   a) At least 3 months before commissioning of a new network element or facility. Upon justification, the TSO may define a different timeline;
   b) At least 3 months before final removal from service of the network element or facility Upon justification the TSO may define a different timeline;
   c) At least 3 months before significant modifications in the network element or facility Upon justification the TSO may define a different timeline;
   a) As soon as possible in case there is a change in the Observability Area;
   b) As soon as an error is detected.

Scheduled data

Article 13
Rights and responsibilities of DSOs

1. All DSOs within the observability area and the control area of the TSO shall provide their planned and unplanned unavailability of network elements to the TSO, at least in D-2 and day-ahead. Transmission connected DSOs shall provide the data directly to the TSO. Non-transmission connected DSOs may provide the data directly to the TSO or through its connecting DSO according to Article 3(4).
2. Each DSO or CDSO shall have access to the scheduled data regarding power schedules of SGUs connected to its network. DSOs and CDSOs shall comply with the requirements defined by the relevant TSO to exchange scheduled data.

Real Time data

Article 14
Real Time Data provided by DSOs

1. Each DSO shall provide to its TSO the real-time data from the observability area defined by the TSO according to Articles 43(1) and 43(2) of Regulation 2017/1485.
2. Each DSO shall fulfil the requirements defined by the TSO in terms of:
   a) Logical connections between parties and protocols used;
   b) Network Architecture including redundancy;
   c) Network security rules;
   d) ID and/or naming convention and data quality;
   e) Data Transmission Parameters and performance;

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

f) Rules of conduct in the case of planned outages and disturbances of communication equipment.

Chapter 3
Responsibilities of SGUs

Structural data

Article 15
Structural Data provided by SGUs

1. Each SGU connected to the transmission system shall provide to its TSO the updated structural data according to Article 45, 52(1) of Regulation 2017/1485 of the facility operated by them in the format specified by its TSO.
2. Each SGU connected to the distribution system shall provide to the TSO or DSO, according to Article 3(4), the updated structural data according to Article 48 and 53 of Regulation 2017/1485 of the facility operated by them in the format specified by its TSO.

Article 16
Notification of changes

1. Each SGU shall review the structural information it shares with the TSOs of its control area at least every 6 months and provide updated information to the TSO and DSO in the following situations:
   a) At least 3 months before commissioning of a new network element or facility. Upon justification, the TSO may define a different timeline;
   b) At least 3 months before final removal from service of the network element or facility Upon justification the TSO may define a different timeline;
   c) At least 3 months before significant modifications in the network element or facility Upon justification the TSO may define a different timeline;
   d) As soon as an error is detected.

Scheduled data

Article 17
Scheduled Data provided by SGUs

1. All SGUs within the control area of the TSO shall provide scheduled data to the TSO. Transmission connected SGUs shall provide the data directly to the TSO. Non-transmission connected SGUs may provide the data directly to the TSO or through its connecting DSO according to Article 3(4).
2. SGUs shall comply with the requirements defined by the relevant TSO to exchange scheduled data.
3. SGUs shall be responsible for the installation, configuration, operation and maintenance of the communication systems to exchange scheduled data with the TSO unless explicitly otherwise agreed with the TSO.

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

Real Time data

Article 18
Real Time Data provided by SGUs

1. All SGUs which are power generation modules not subject to the EU Regulations 2016/631, or which are HVDC systems not subject to EU Regulations 2016/1447, or which are demand facilities not subject to EU Regulations 2016/1388, shall comply with the requirements under this KORRR regarding to the real-time data exchange. In case of non-compliance, by 3 months after the applicability of the requirements in the KORRR, SGUs shall provide TSO or DSO technical justifications, that shall be evaluated by TSO or DSO. On the basis of this evaluation TSO or DSO in coordination with the TSO, may exempt particular SGU from requirement to provide real time data.
2. All SGUs within the control area of the TSO shall provide real time data in accordance with Articles 47, 50, 52(3) and 53 of Regulation 2017/1485 to the TSO. Transmission connected SGUs shall provide the data directly to the TSO. Non-transmission connected SGUs may provide the data directly to the TSO or through its connecting DSO according to Article 3(4).
3. Each SGU providing data directly to the TSO shall fulfil the requirements defined by the TSO in terms of:
   a) Logical connections between parties and protocols used;
   b) Network architecture including redundancy;
   c) Network security rules;
   d) ID and/or naming convention and data quality;
   e) Data Transmission Parameters and performance;
   f) Rules of conduct in the case of planned outages and disturbances of communication equipment.
4. SGUs shall be responsible for the installation, configuration, operation and maintenance of the communication systems to exchange real time data with the TSO unless explicitly otherwise agreed with the TSO.

Chapter 4
Responsibilities of NEMOs

Scheduled data

Article 19
Responsibilities of NEMOs

1. Each NEMO shall agree with its respective TSO or TSOs the process to exchange information regarding markets operated by the NEMO.
2. Each NEMO shall provide to its TSO or TSOs the results from markets operated by them according to the agreement on previous article.
3. Each NEMO shall be responsible for the installation, configuration and maintenance of the communication systems to exchange scheduled data with the TSO unless explicitly otherwise agreed with its TSO.
4. Each NEMO shall make available the market results to the relevant parties.

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu

TITLE 3
Final provisions

Article 20
Implementation date of KORRRs

1. Upon approval of this KORRRs proposal each TSO shall publish it on the internet in accordance with Article 8(1) of Regulation 2017/1485.
2. By 18 months after entry into force of SO GL, TSOs shall apply the proposed KORRRs as described in Title 2 as soon as all regulatory authorities have approved the proposed KORRRs or a decision has been taken by the Agency in accordance with Article 6(8) and 7(3) of the Regulation 2017/1485.

Article 21
Language

The reference language for this KORRR Proposal shall be English. For the avoidance of doubt, where TSOs need to translate this KORRR Proposal into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 8 (1) of the Commission Regulation (EU) 2017/1485 and any version in another language, the relevant TSOs shall, in accordance with national legislation, provide the relevant national regulatory authorities with an updated translation of the KORRR.

Appendix: (if needed)

ENTSO-E AISBL • Avenue de Cortenbergh 100 • 1000 Brussels • Belgium • Tel + 32 2 741 09 50 • Fax + 32 2 741 09 51 • info@entsoe.eu • www. entsoe.eu